CLAIMS:

- $1. \qquad A\ NO_X\ control\ for\ an\ exhaust\ comprising:$ $a\ nickel\ compound\ and\ a\ NO_X\ adsorber,\ wherein\ the\ NO_X$ $adsorber\ is\ selected\ for\ an\ oxygen\ content\ in\ said\ exhaust\ greater\ than\ about\ 1$ $molar\%\ based\ on\ the\ total\ exhaust.$
- 2. The NO_X control as in Claim 1, wherein said nickel compound comprises nickel oxide.
- 3. The NO_X control as in Claim 2, wherein said nickel compound comprises about 1% to about 100% nickel oxide based on total weight of the nickel composition.
- 4. The NO_X control as in Claim 2, wherein said nickel compound comprises about 50% to about 100% nickel oxide based on total weight of the nickel composition.
- 5. The NO_X control as in Claim 2, wherein said nickel compound comprises about 80% to about 100% nickel oxide based on total weight of the nickel composition.
- 6. The NO_X control as in Claim 1, wherein said nickel compound comprises a coating on said NO_X adsorber.
- 7. The NO_X control as in Claim 1, wherein said nickel compound comprises a plurality of particulates dispersed throughout said NO_X adsorber.
- 8. The NO_X control as in Claim 1, wherein said nickel compound comprises a coating on said NO_X catalyst system and further comprises a plurality of particulates dispersed throughout said NO_X adsorber.

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- 9. The NO_X control as in Claim 1, wherein said nickel compound is formed on a first support, and further wherein said NO_X adsorber is formed on a second support independent from said first support.
- 10. The NO_X control as in Claim 9, wherein said nickel compound is configured for positioning in said exhaust upstream from said NO_X adsorber.
- 11. The NO_X control as in Claim 1, wherein said nickel compound is formed as a structure, and further wherein said NO_X adsorber is formed on a support, said support being independent from said structure.
- 12. The NO_X control as in Claim 1, wherein said NO_X adsorber comprises a catalyst material and a support, said catalyst material selected from the group consisting of cesium, barium, lanthanum, silver, zirconium, and alloys, oxides, and combinations comprising at least one of the foregoing catalyst materials.
- 13. A system for treating an exhaust gas comprising:

 a non-thermal plasma reactor; and

 a NO_X control comprising a nickel compound and a NO_X

 adsorber, wherein the NO_X adsorber is selected for an oxygen content in said exhaust greater than about 1 molar%.
 - 14. A system for treating an exhaust gas comprising: a first non-thermal plasma reactor; a particulate trap;
 - a second non-thermal plasma reactor; and
 - a NO_X control comprising a nickel compound and a NO_X adsorber, wherein the NO_X adsorber is selected for an oxygen content in said exhaust greater than about 1 molar%.

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15. A method for poison protection in an engine exhaust, comprising:

exposing said exhaust having an oxygen content greater than about 1 molar% to a NO_X control comprising a nickel compound and a NO_X adsorber, wherein the NO_X adsorber is selected for an oxygen content in said exhaust greater than about 1 molar%.

16. A method for forming a poison protection component in a NO_X control, comprising:

mixing, milling, or sintering a nickel compound integrally with a $NO_{\rm X}$ adsorber.

17. A method for forming a poison protection component in a NO_X control, comprising:

processing a nickel compound with a NO_X adsorber by mixing, milling, sintering, washcoating, imbibing, impregnating, physisorbing, chemisorbing, precipitating, vapor depositing, or any combination of at least one of the foregoing processing techniques.